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ORIGINAL RESEARCH



Psychological Distress among Students and Cadets of Universities in the War Conditions



Author)

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Abstract

Background and Aim of Study:

The full-scale military aggression against Ukraine in February 2022 had an extremely negative impact on the psyche of its residents. This is especially felt by young people who should continue studying at universities in these difficult conditions.

The aim of the study: to identify the specifics of psychotraumatic impact in the conditions of war and martial law on university students and cadets, to detail their level of stress, anxiety and depression.

Material and Methods:

The study was conducted in November 2022 based on KNUIA, Ukraine. Respondents aged 20-27 were divided into 3 groups: 1) 115 cadets: 85.22% men and 14.78% women, who are outside of permanent deployment; 2) 107 students: 59.81% men and 40.19% women, who are forcibly displaced persons in Ukraine and abroad; 3) 103 students: 50.49% men and 49.51% women, located in Kharkiv and Kharkiv region. A Google-form questionnaire was used to study the level and nature of psychotraumatization. Data collection on the level of stress and its content was carried out using the DASS-21 tool.

Results:

Among the group 3 respondents, the psychotraumatic impact is characterized by high tension and the specific weight of vital psychogenia. Severe and extremely severe manifestations of anxiety in group 3 students were 2-3 times higher than the similar indicators of groups 1, 2 respondents. Manifestations of depression among women are the highest in group 3 respondents. Stress was more expressed among men in all groups. Group 3 respondents had the highest stress (distress)

indicators among men.

Conclusions: The negative impact of the war in Ukraine on the student youth' mental health

requires the active implementation of psychological assistance and psychoprophylaxis measures in accordance with the individual results of

psychodiagnostics.

Keywords: mental health, psychotraumatic impact, anxiety, depression, stress, students, war

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Introduction

In February 2022, the Russian army invaded the territory of Ukraine and started a military aggression. As a result, martial law was declared in Ukraine. Violation of the mental health of the population during the war is a well-known problem. War and martial law have a negative impact on the psyche of an individual because they are traumatic in their essence.

Thus, according to the latest research results (Gradus Research, 2022), about 42% of Ukrainian citizens complain of a feeling of tension, and 41% of a feeling of fatigue. 72% of the population of Ukraine call war the most frequent cause of stress.

One of the risk groups and psychological problems in war and martial law conditions is youth, including students. During the war, young people are affected by the following psychogenic factors: physical, mental and information-psychological overload, personal danger and the danger of loved ones, loss of income source or job, loss of home and property, risk of death, etc. All this leads to the emergence of such psychological disorders as anxiety, depression, post-traumatic stress disorder, etc. (Gradus Research, 2022).

As Joshi and O'Donnell (2003) note, mental disorders in war are actually "normal response to abnormal events". This makes it necessary to study the influence of psychogenic factors of war on youth studying at universities and to analyze mental disorders during the war among all categories of students.

The aim of the study. To identify the specifics of psychotraumatic impact in war and martial law conditions on university students and cadets, to detail their level of stress, anxiety and depression for the development of psychological assistance and psychoprophylaxis measures.

Materials and Methods

The study was conducted in November 2022 during the Russian-Ukrainian war.

The respondents of the study were cadets and students studying at the Department of Military Training of the Kharkiv National University of Internal Affairs (KNUIA), Ukraine. The age of the researched was 20-27 years.

We separated three groups from them:

Group 1 is the KNUIA cadets who are outside the borders of permanent deployment on the territory of Ukraine. The group consisted of 115 people, including 98 (85.22%) men and 17 (14.78%) women.

Group 2 is the KNUIA students who are forcibly displaced persons and are in the territory of Ukraine or

outside its borders. The group consisted of 107 people, including 64 (59.81%) men and 43 (40.19%) women. Group 3 is the KNUIA students who did not change their place of permanent residence during the war and are located in the territory of Kharkiv and Kharkiv region. The group consisted of 103 people, including 52 (50.49%) men and 51 (49.51%) women.

To study the level and nature of psychotraumatization of the KNUIA cadets and students in war and martial law conditions, we used an online questionnaire based on standard Google-forms. We developed it in accordance with the objectives of this research and made public (KNUIA Department of Military Training & KRPOCH, 2022).

The questionnaire is anonymous and consists of 17 questions related to the place of study, gender, age, region of residence and factors of psychological traumatization of the individual in war conditions.

Data collection on the stress level and its content was carried out using the Depression Anxiety Stress Scales (DASS-21) tool. The research was conducted using online networks: Telegram, Facebook, WhatsApp, etc. by sending a questionnaire to respondents. In addition, observation was carried out in all groups during remote and face-to-face classes.

DASS-21 tool (short form DASS, 21 questions) is designed to measure negative emotional states of depression, anxiety and stress. The DASS subscales were evaluated according to the technique (Psychology Foundation of Australia, 2022). The number of cadets and students with normal, minor, moderate, severe and extremely severe symptoms was assessed. According to the "Depression" / "Anxiety" / "Stress" scales, the manifestations of the indicators are: normal (0-3/0-4/0-7 points), minor (5-6/4-5/8-9 points), moderate (7-10/6-7/10-12 points), severe (11-13/8-9/13-16 points), extremely severe (14+/10+/17+). The average score on the scales was calculated as the arithmetic mean of the indicators. The advantage of this technique is its universality, as it is suitable for clinical and non-clinical conditions (Henry & Crawford, 2005).

Results

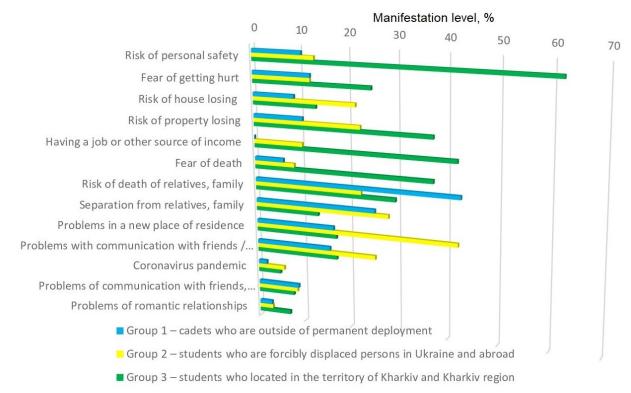
Assessments of the level and nature of psychotraumatization of the KNUIA cadets and students in the war and martial law conditions were found using an online questionnaire (KNUIA Department of Military Training & KRPOCH, 2022). The results are presented in Table 1 and Figure 1.



Table 1 *Psychogenic Factors Affecting to Respondents*

			Gro	oup 1					oup 2		Group 3							
Factors	(n=115, including 98 male, 17 female)						(n=	107, inc	64 male	male)	(n=	(n=103, including 52 male, 51 female)						
	total	%	male	%	female	%	total	%	male	%	female	%	total	%	male	%	female	%
Risk of personal safety	12	10.4	9	9.2	3	17.7	14	13.1	6	9.4	8	18.6	65	61.9	26	50.0	39	76.5
Fear of getting hurt	14	12.2	12	12.2	2	11.8	13	12.2	7	10.9	6	14.0	26	24.8	18	34.6	8	15.7
Risk of house losing	10	8.7	6	6.1	4	23.5	23	21.5	11	17.2	12	27.9	14	13.3	6	11.5	8	15.7
Risk of property losing	12	10.4	9	9.2	3	17.7	24	22.4	12	18.8	12	27.9	39	37.1	21	40.4	18	35.3
Having a job or other source of income	0	0.0	0	0.0	0	0.0	11	10.3	7	10.9	4	9.3	44	41.9	39	75.0	5	9.8
Fear of death	7	6.1	6	6.1	1	5.9	9	8.4	3	4.7	6	14.0	39	37.1	17	32.7	22	43.1
Risk of death of relatives, family	49	42.6	36	36.7	13	76.5	24	22.4	13	20.3	11	25.6	31	29.5	14	26.9	17	33.3
Separation from relatives. family	29	25.2	17	17.4	12	70.6	30	28.0	12	18.8	18	41.9	14	13.3	5	9.6	9	17.7
Problems in a new place of residence	19	16.5	11	11.2	8	47.1	45	42.1	28	43.8	17	39.5	18	17.1	12	23.1	6	11.8
Problems with communication with friends / loved ones	18	15.7	14	14.3	4	23.5	27	25.2	15	23.4	12	27.9	18	17.1	8	15.4	10	19.6
Coronavirus pandemic	2	1.7	1	1.0	1	5.9	6	5.6	3	4.7	3	7.0	5	4.8	2	3.9	3	5.9
Problems of communication with friends, acquaintances	10	8.7	8	8.2	2	11.8	9	8.4	5	7.8	4	9.3	8	7.6	5	9.6	3	5.9
Problems of romantic relationships	3	2.6	2	2.0	1	5.9	3	2.8	2	3.1	1	2.3	7	6.7	5	9.6	2	3.9

Figure 1The Level of Manifestation of Psychogenic Factors According to Three Groups of Respondents





Based on the obtained results, it was established that for group 1 of respondents (cadets), the most important factors of mental trauma are the risk of death of relatives, family (42.61%), separation from relatives, family (25.22%), and problems of adaptation to a new place of residence (16.52%).

For group 2 of respondents (students who are in the territory of Ukraine and beyond), problems of adaptation to a new place of residence are relevant (42.06%), separation from relatives, family (28.04%), problems with communication with friends/relatives (25.23%).

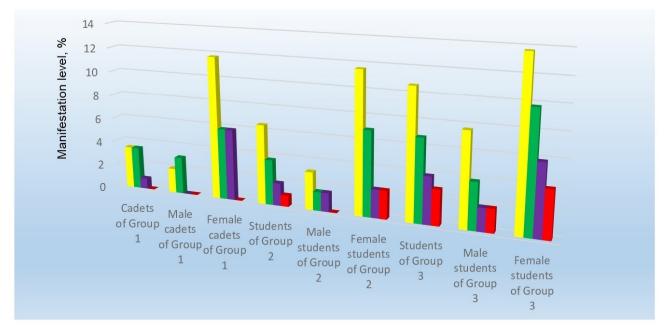
At the same time, for group 3 respondents (students located in Kharkiv region), the indicators of mental trauma were higher than other groups and included the following: personal safety risk (61.90%), lack of work or other source of income (37.14%), fear of death and risk of property loss (37.86%). The high specific weight of vital psychogenia among the respondents of group 3 is explained by the complex military-humanitarian situation and essentially inhuman conditions of existence in Kharkiv and the region (daily rocket attacks, frequent stays in shelters, lack of light, water and heat in some areas, deaths and injuries of the population from shelling and anti-personnel mines, etc.).

Figure 2The Level of Manifestation on Anxiety among Respondents

The smallest specific weight for group 3 respondents is the following psychogenies: the coronavirus pandemic and romantic relationship problems, which do not exceed 5-6%.

The significance of the problems of living in a new place for the respondents of groups 1 (42.06%) and 2 (16.52%) is explained by a certain uncertainty of the situation regarding the duration of the war in Ukraine and the deterioration of the life quality in the new place. The relevance of problems with communication with friends/relatives for groups 2 (25.23%) and 1 (15.65%) is caused both by their significance for respondents and the importance of communication using mobile and Internet communication for young people in general. It is related to the dissemination of socially significant information, which is a cognitive resource in the process of forming ideas, opinions, value orientations and adequate behavior. Therefore, the violation of mobile and Internet communication after the Russian shelling of Ukraine is always perceived sensitively by the youth. Further detailing of symptoms of mental trauma was carried out using the DASS-21 tool.

Manifestations of anxiety among the KNUIA cadets and students in the war and martial law conditions are shown in Figure 2.



■ Severe manifestations

Based on the research conducted using the DASS-21 tool, we found the following quantitative results on the "Anxiety" scale.

■ Moderate manifestations

Minor manifestations

For respondents of group 1: the absence of anxiety symptoms was observed in 92.17% of people, minor and moderate manifestations of anxiety appeared in 3.48% of people, severe – in 0.87% of people, and a critical level of anxiety was not observed.

For group 2 respondents: the absence of anxiety symptoms was observed in 86.92% of servicemen, minor – in 6.54%, moderate – in 3.74%, severe manifestations of anxiety were observed in 1.87% of people, and extremely severe manifestations of anxiety appeared in 1 (0.93%) student.

■ Extremely severe manifestations

For the respondents of group 3, severe (3.88%) and extremely severe (2.91%) manifestations of anxiety



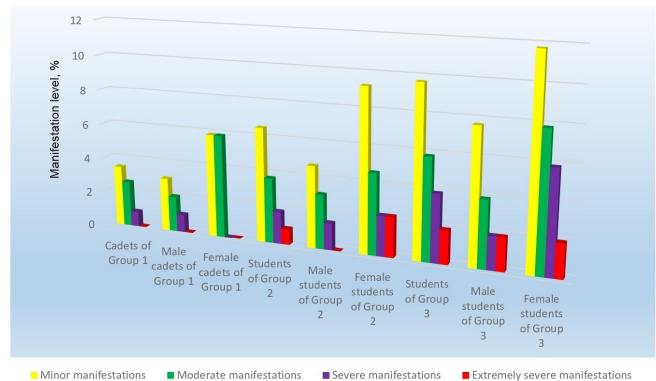
were 2-3 times higher than similar indicators of groups 1 and 2.

It should be noted that, according to the results of the study, anxiety is more pronounced in women of all groups. The absence of anxiety symptoms was observed only in 66.67% of women in group 3, 76.74% and

76.47% of women in groups 2 and 1. At the same time, similar indicators for men in groups 3, 2, 1 were 84.62%, 93.75%, 94.90%, respectively.

Manifestations of depression among the KNUIA cadets and students in the war and martial law conditions are shown in Figure 3.

Figure 3The Level of Manifestation on Depression among Respondents



According to the "Depression" scale, the absence of depressive symptoms was observed in respondents of group 1 (93.04%), group 2 (86.92%) and group 3 (78.64%). Minor manifestations of depression were observed in 3.48% of group 1 respondents, in 6.54% of group 2 respondents, and in 9.71% of group 3 respondents. Moderate manifestations of depression in respondents of group 1 amounted to 2.61%, which is significantly less than in respondents of groups 2 (3.74%) and 3 (5.83%). Severe depression was present in 1.87% and 3.88% of students of groups 2 and 3, which is significantly higher than the indicators of cadets in group 1 (0.87%). Extremely severe manifestations of depression were not observed in the cadets of group 1, while they were observed in students of groups 2 (0.93%) and 3 (1.94%).

Gender characteristics: depression is more pronounced in women of groups 2 and 3. The rate of absence of depression in women of groups 2 (81.40%) and 3 (88.24%) is less than similar indicators for men in groups 2 and 3: 93.02% and 94 ,12% respectively. Among male cadets of group 1 (94.12%), the rate of absence of depression is slightly higher than among females (88.24%).

Manifestations of stress among the KNUIA cadets and students in the war and martial law conditions are shown in Figure 4.

The study indicators according to the "Stress" scale for group 1 are as follows: absence of stress symptoms was observed in 93.91% of cadets; minor manifestations of stress were observed only in 3.48% of people; moderate manifestations in 1.74% of people; they were severe in 0.87% of people.

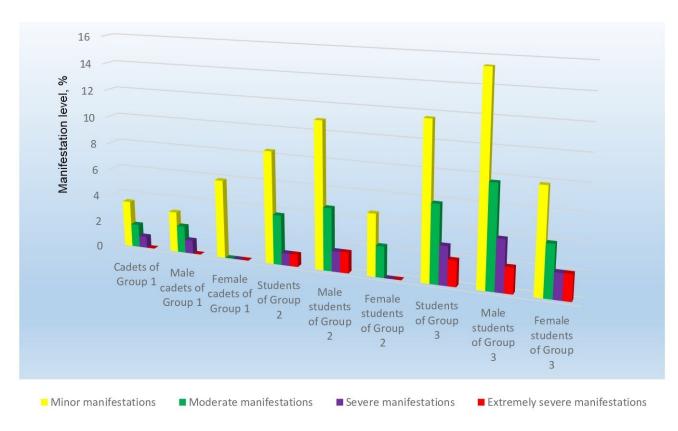
For students of group 2, the indicators were slightly higher: minor manifestations of stress were observed in 8.41% of people, moderate manifestations in 3.74%, severe and extremely severe manifestations (distress) in 0.93% of people.

Group 3 of students had the highest indicators: minor manifestations of stress were observed in 11.65% of people; moderate manifestations in 5.83% of people; severe manifestations in 2.91%, extremely severe manifestations (distress) in 1.94% of people.

It should be noted that according to the results of the study, stress was more pronounced among men compared to women in all groups. Moreover, the highest indicators of stress (distress) among men were among male students of group 3. The absence of stress symptoms was observed in 71.15% of men in group 3, 81.25% in group 2, and 93.88% in group 1. Similar indicators for women of groups 3, 2 and 1 were 84.31%, 93.02%, 94.12%, respectively.



Figure 4The Level of Manifestation on Stress among Respondents



The general indicators of anxiety, depression and stress among the KNUIA cadets and students in the war and

martial law conditions are shown in Figure 5 and Table 2.

Figure 5The Level of Manifestation on the General Indicators of Anxiety, Depression and Stress among Respondents

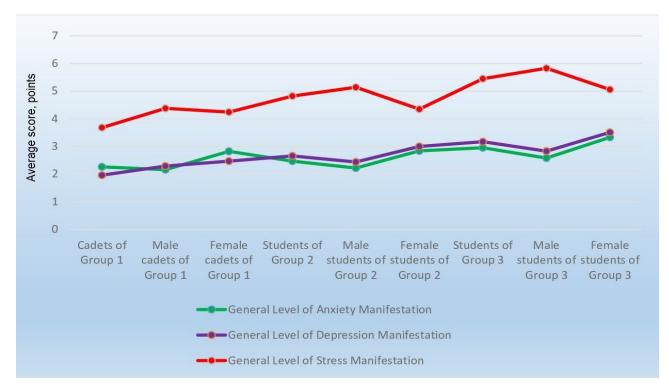




 Table 2

 Manifestations of Anxiety, Depression and Stress among the Respondents

Manifestation level	Group 1 (n=115, including 98 male, 17 female)						(n	=107, inc	oup 2 ; 64 male	male)	Group 3 (n=103, including 52 male, 51 female)								
	total	%	male	%	female	%	total	%	male	%	female	%	total	%	male	%	female	%	
Absent	106	92.17	93	94.90	13	76.47	93	86.92	60	93.75	33	76.74	78	75.73	44	84.62	34	66.67	
Minor	4	3.48	2	2.04	2	11.76	7	6.54	2	3.13	5	11.63	11	10.68	4	7.69	7	13.73	
Moderate	4	3.48	3	3.06	1	5.88	4	3.74	1	1.56	3	6.98	7	6.80	2	3.85	5	9.80	
Severe	1	0.87	0	0.00	1	5.88	2	1.87	1	1.56	1	2.33	4	3.88	1	1.92	3	5.88	
Extremely severe	0	0.00	0	0.00	0	0.00	1	0.93	0	0.00	1	2.33	3	2.91	1	1.92	2	3.92	
Average score (Anxiety)	2	.26	2	2.18	2.71		2.47		2.22		2.84		2.95		2.58		3.33		
Absent	107	93.04	92	93.88	15	88.24	93	86.92	58	90.63	35	81.40	81	78.64	44	84.62	37	72.55	
Minor	4	3.48	3	3.06	1	5.88	7	6.54	3	4.69	4	9.30	10	9.71	4	7.69	6	11.76	
Moderate	3	2.61	2	2.04	1	5.88	4	3.74	2	3.13	2	4.65	6	5.83	2	3.85	4	7.84	
Severe	1	0.87	1	1.02	0	0.00	2	1.87	1	1.56	1	2.33	4	3.88	1	1.92	3	5.88	
Extremely severe	0	0.00	0	0.00	0	0.00	1	0.93	0	0.00	1	2.33	2	1.94	1	1.92	1	1.96	
Average score (Depression)	1	1.96		2.29		2.47		2.66		2.44		3.00		3.17		2.83		3.51	
Absent	108	93.91	92	93.88	16	94.12	92	85.98	52	81.25	40	93.02	80	77.67	37	71.15	43	84.31	
Minor	4	3.48	3	3.06	1	5.88	9	8.41	7	10.94	2	4.65	12	11.65	8	15.38	4	7.84	
Moderate	2	1.74	2	2.04	0	0.00	4	3.74	3	4.69	1	2.33	6	5.83	4	7.69	2	3.92	
Severe	1	0.87	1	1.02	0	0.00	1	0.93	1	1.56	0	0.00	3	2.91	2	3.85	1	1.96	
Extremely severe	0	0.00	0	0.00	0	0.00	1	0.93	1	1.56	0	0.00	2	1.94	1	1.92	1	1.96	
Average score (Stress)	3	.68	4.38		4.24		4	4.82		5.14		4.35		5.45		5.83		5.06	

The average score on the "Anxiety" scale for group 1 was 2.26 points, which is less than the indicators of groups 2 (2.47 points) and 3 (2.95 points). In our opinion, this is explained by the long-term uncertainty of the military and humanitarian situation in Kharkiv and the region at the time of the study. It should be noted that the average score on the "Anxiety" scale for female students of groups 3 (3.33 points) and 2 (2.84 points) was approximately 1.29 times higher than that of male students. This manifested in them in the form of helplessness, uncertainty, helplessness, powerlessness, insecurity, loneliness, premonition of failure, inability to make a decision, etc.

The average score on the "Depression" scale for group 3 was 3.17 points, which is also significantly higher than the indicators for groups 2 (2.66 points) and 3 (1.96 points). Among the gender features on the "Depression" scale, it is possible to note that the average score of female students in the territory of Kharkiv and the region was the highest among all groups and amounted to 3.51 points. For male and female cadets of group 1, the average score on the "Depression" scale was significantly lower and practically did not differ: 2.47 and 2.29 points, respectively. This is explained, in our opinion, by the standard protected conditions of accommodation and training. Depression manifested itself in them during classes in the form of bad mood, low self-esteem, pessimism, apathy, lethargy, quick fatigue, constant dissatisfaction, abandonment and hopelessness. The average score on the "Stress" scale for students of group 3 was the highest among all respondents (5.45 points). In our opinion, this is explained by the high

psychogenic influence of the military-humanitarian situation in Kharkiv and the region that existed at the time of the study. It should be noted that the average score of groups 1, 2, and 3 on the "Stress" scale among men was significantly higher than among women, and amounted to 4.38, 4.35, and 5.83 points, respectively, which was manifested when communicating in online classes in the form of irritability, aggression, excessive optimism, drowsiness, tension and irritability.

Discussion

Studying the mental health of student youth who continue their education in war and martial law conditions remains an insufficiently studied topic. Since for a long time European countries with a high level of development of the higher education system were not in war and martial law conditions. Kharkiv is the most student city of Ukraine, with more than 30 state institutions of higher education (universities, academies), as well as a large number of scientific institutions, colleges and private educational institutions of various types. Therefore, one of the Kharkiv universities, which provides education for both students and cadets, was chosen for the study. In addition, the choice of the research participants was determined by the fact that they all studied at the KNUIA Department of Military Training. After graduation, they received a military rank and could be involved in military operations.

So, the relevance of this study was determined by the need to provide both psychological assistance to students and cadets, as well as assistance in organizing the

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educational process for all stakeholders in the conditions of the war active phase.

A comprehensive study (developed questionnaire and DASS-21 tool) made it possible to identify psychogenic factors affecting cadets and students in war and martial law conditions, as well as to detail psychopathological symptoms on "Anxiety", "Depression", and "Stress" scales.

Current academic publications in psychology, medicine, pedagogy, as well as the authors' own experience allowed us to build the methodological basis of our research.

The presence of a humanitarian crisis negatively affects the mental health of the population and can lead to serious psychological and social consequences. Youth exposed to conflict face intense emotional stress that can lead to lifelong mental health and psychosocial problems (UNICEF, 2022).

In addition, it must be taken into account that in the context of the contemporary world globalization, the influence of a war-taking place in one country will inevitably lead to consequences in other countries as it affects international issues of politics, economics, population migration, healthcare, etc.

Mental health effects of war also cut across all strata of civilians. So there is an urgent need not only for crossnational research on the mental health effects of war on civilians using improved methods of study, but also for a continuous re-evaluation of the nosology of these effects (Karam & Ghosn, 2003).

Early experience of the individual affects the state of mental health. This fact should be considered. As early as World War II, the effects of war on mental health and persistent symptoms in children were studied. Among other, the earliest reaction is that to sirens and noise in general. It was found that the incident was assimilated in varying degrees according to the stage of development of the child's personality. The extraordinary toughness of the child and his flexibility in adapting to potentially threatening situations has been proven (Bodman, 1941). After the end of the World War, local wars broke out in different parts of the globe. Scientists regularly conducted research on the impact of war on people in various aspects of population migration (Mesa-Vieira et al., 2022), their mental health, etc. In their opinion, the experience of war and displacement can have profound effects on children's affective development and mental health. However the mechanisms underlying these effects remain unknown (Michalek et al., 2022).

Current research on post-traumatic stress disorder interventions for children and adolescents affected by war points to a positive experience. Improved social skills were indicated following most interventions. Nevertheless, the paucity of evidence on effective treatment options for war-affected children and adolescents was highlighted (Alzaghoul et al., 2022).

Our study correlates with the results of the research by Veronese et al. (2022) on social support, resilience and mental health in low-intensity warfare context among a sample of Palestinian university students living on the Gaza Strip. These researchers note an increase in mental

distress in the form of anxiety, depression, and acute stress.

It is known that mental health and psychosocial support programmes are some of the least expensive activities in humanitarian response. However, they can have a priceless impact on the lives of people who need them (International Federation of Red Cross and Red Crescent Societies, n. d.).

According to independent experts, Russian military aggression against Ukraine is an intended genocide (New Lines Institute for Strategy and Policy & Raoul Wallenberg Centre for Human Rights, 2022).

Therefore, researchers are confident that this war will cause significant damage to the mental health of the Ukrainian population (Shevlin et al., 2022).

It should not be forgotten that the mental health status of the Ukrainian population, in particular university students, has already been weakened by the impact of the COVID-19 pandemic (Melnyk et al., 2020).

Scientists suggest that the cumulative impact of COVID-19 and the war in Ukraine will severely compromise physical and mental health globally, affecting Ukrainians in particular (Kalaitzaki et al., 2022).

In our previous research, we studied the problem of diagnostics and prevention of mental disorders to preserve a personality's mental health (Melnyk & Stadnik, 2018); psycho-diagnostic methods "Resistance to military mental traumatization" was used to study the impact of war on the mental state of an individual (Melnyk, Prykhodko, & Stadnik, 2019). Resistance to post-traumatic stress reactions was checked using the following methods: "Mississippi Scale for Estimating Post-Traumatic Reactions", "Depression Anxiety Stress Scales", and "Insomnia Severity Index" (Melnyk & Stadnik, 2020; Melnyk, Stadnik, & Pypenko, 2020).

Many years of experience in studying the problem of preserving mental health of a personality allowed us to develop and test effective means of preserving mental health and preventing mental disorders in war and martial law conditions.

First of all, we focus on the fact that this research should be comprehensive both in the aspect of personality diagnosis and in the aspect of medical-psychological support providing. The developed model of medical-psychological support of specialists' professional activity, which is verified on military-men in war conditions (Melnyk, Prykhodko, & Stadnik, 2019), showed the effectiveness of this approach.

Traditional methods of psychological, educational, physical cultural and healthy work can also be an effective means of preserving the mental health of student youth (Melnyk, 2019). Among the effective methods of psychological assistance to student youth in war and martial law conditions, we can recommend using psychological transformation games. In particular, based on KNUIA, we used the psychological transformation game "My Dao", which proved the effectiveness of the applied technique in these conditions (Melnyk & Stadnik, 2021).



Conclusions

Therefore, the war in Ukraine has a negative impact on the mental health of student youth. Despite the inhuman conditions of existence, especially in the territories of active hostilities (Kharkiv region), young people have a huge potential for psychological stability. Conducted studies have shown that for students of KNUIA who did not change their place of permanent residence and who are in the territory of Kharkiv and the region, the psychotraumatic impact during the war is characterized by high stress and the specific weight of vital psychogenies: risk of personal safety, lack of work or other source of income, fear death and the risk of property loss. For students of higher education institutions who are forcibly displaced persons and are outside active hostilities (on the territory of Ukraine and beyond) and cadets who are outside permanent dislocation, the following psycho-traumatic factors are relevant: risk of death of relatives, separation from family and problems of adjustment in a new place of residence. In addition, the problem of communication with friends and relatives is relevant for students and cadets who are outside permanent deployment. In our opinion, this is explained by the importance of communication using mobile and Internet connections for young people.

Further detailing of psychopathological symptoms, which was carried out with the help of the DASS-21 tool, showed that in students who are located in the territory of Kharkiv and the region, according to the "Anxiety" scale, severe and extremely severe manifestations of anxiety were 2-3 times higher than similar indicators of groups 1, 2. In our opinion, this is explained by the longterm uncertainty of the military and humanitarian situation in Kharkiv and the region during the study. Anxiety is more expressed among women of all groups than among men. The average score on the "Anxiety" scale for female students of groups 2, 3 was approximately 1.29 times higher than that of male students. This manifested in them in the form of helplessness, uncertainty, powerlessness, insecurity, loneliness, premonition of failure, impossibility to make decisions, etc.

Extremely severe manifestations of depression were not observed in cadets who are outside permanent deployment. At the same time, students of groups 2, 3, located in the territory of the Kharkiv region, in Ukraine and abroad, had such manifestations. Gender specifics of the manifestation of depression: its greatest manifestation among female students of groups 2 and 3. For male and female cadets of group 1, the average scores on the "Depression" scale were significantly lower and practically did not differ from each other. This is explained, in our opinion, by their standard protected accommodation and training conditions. Depression during classes manifested itself in them in the form of bad mood, low self-esteem, pessimism, apathy, lethargy, quick fatigue, constant dissatisfaction, abandonment and hopelessness.

Stress was more pronounced in men compared to women in all studied groups. This manifested itself when communicating in online classes in the form of irritability, aggression, excessive optimism, drowsiness, tension and irritability. Students of group 3 had the highest levels of stress (distress) among men. In our opinion, this is due to the high psychogenic influence of the military and humanitarian situation in Kharkiv and the region.

We see the prospect of further scientific research in the development of effective psychological assistance and psychoprophylaxis measures among student youth.

Ethical Approval

The study protocol was consistent with the ethical guidelines of the 1975 Declaration of Helsinki as reflected in a prior approval by the Institution's Human Research Committee.

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References

- Alzaghoul, A., McKinlay, A., & Archer, M. (2022). Post-traumatic stress disorder interventions for children and adolescents affected by war in low-and middle-income countries in the Middle East: Systematic review. *BJPsych Open*, 8(5), e153. https://doi.org/10.1192/bjo.2022.552
- Bodman, F. (1941). War conditions and the mental health of the child. *British Medical Journal*, *2*, 486. https://doi.org/10.1136/bmj.2.4213.486
- Gradus Research. (2022, October). Psykhichne zdorovia ta stavlennia ukraintsiv do psykholohichnoi dopomohy pid chas viiny [Mental health and the attitude of Ukrainians to psychological help during the war]. https://gradus.app/documents/307/Gradus_Resea rch Mental Health Report full version.pdf
- Henry, J. D., & Crawford, J. R. (2005). The short-form version of the Depression Anxiety Stress Scales (DASS-21): construct validity and normative data in a large non-clinical sample. *The British Journal of Clinical Psychology*, 44(Pt 2), 227–239. https://doi.org/10.1348/014466505X29657
- International Federation of Red Cross and Red Crescent Societies. (n. d.). *Mental health and psychosocial support*. IFRC. https://www.ifrc.org/our-work/health-and-care/community-health/mental-health-and-psychosocial-support
- Joshi, P. T., & O'Donnell, D. A. (2003). Consequences of child exposure to war and terrorism. *Clinical Child and Family Psychology Review*, 6(4), 279-291. https://doi.org/10.1023/b:ccfp.0000006294.88201.68
- Kalaitzaki, A. E., Tamiolaki, A., & Vintila, M. (2022). The compounding effect of COVID-19 and war in Ukraine on mental health: A global time bomb soon to explode? *Journal of Loss and Trauma*. https://doi.org/10.1080/15325024.2022.2114654
- Karam, E., & Ghosn, M. B. (2003). Psychosocial consequences of war among civilian populations *Current Opinion in Psychiatry*, *16*(4), 413-419. https://doi.org/10.1097/00001504-200307000-00007



- KNUIA Department of Military Training, & KRPOCH. (2022). *Questionnaire for cadets (students)* [Data set]. https://forms.gle/Yc4NndjdJp1io21E7
- Melnyk, Yu. B., Pypenko, I. S., & Maslov, Yu. V. (2020). COVID-19 pandemic as a factor revolutionizing the industry of higher education. *Rupkatha Journal on Interdisciplinary Studies in Humanities*, 12(5). https://doi.org/10.21659/rupkatha.v12n5.rioc1s19n2
- Melnyk, Yu., & Stadnik, A. (2018). Mental health of a personality: Diagnostics and prevention of mental disorders. *International Journal of Education and Science*, *I*(3-4), 50. https://doi.org/10.26697/ijes.2018.3-4.37
- Melnyk, Yu. B., Stadnik, A. V., & Pypenko, I. S. (2020).

 Resistance to post-traumatic stress reactions of vulnerable groups engaged in pandemic liquidation. *International Journal of Science Annals*, 3(1), 35–44. https://doi.org/10.26697/ijsa.2020.1.5
- Melnyk, Yu. B., & Stadnik, A. V. (2021). The impact of psychological transformation game "My Dao" on value orientations of participants. *International Journal of Science Annals*, 4(2), 21–29. https://doi.org/10.26697/ijsa.2021.2.3
- Melnyk, Yu. (2019). The influence of educational, physical cultural and healthy work on the formation of the health culture of master's students. *Journal of Physical Education and Sport*, 19(1), 219–226. https://doi.org/10.7752/jpes.2019.s1033
- Mesa-Vieira, C., Haas, A. D., Buitrago-Garcia, D., Roa-Diaz, Z. M., Minder, B., Gamba, M., Salvador, D. Jr., Gomez, D., Lewis, M., Gonzalez-Jaramillo, W. C., Pahud de Mortanges, A., Buttia, C., Muka, T., Trujillo, N.,

- & Franco, O. H. (2022). Mental health of migrants with pre-migration exposure to armed conflict: a systematic review and meta-analysis. *The Lancet. Public health*, 7(5), e469–e481. https://doi.org/10.1016/S2468-2667(22)00061-5
- Michalek, J., Lisi, M., Binetti, N., Ozkaya, S., Hadfield, K., Dajani, R., & Mareschal, I. (2022). War-related trauma linked to increased sustained attention to threat in children. *Child Development*, *93*(4), 900-909. https://doi.org/10.1111/cdev.13739
- New Lines Institute for Strategy and Policy, & Raoul Wallenberg Centre for Human Rights. (2022, May). An independent legal analysis of the Russian Federation's breaches of the genocide convention in Ukraine and the duty to prevent. https://newlinesinstitute.org/wp-content/uploads/English-Final-FINAL-Report-updated-citations-1.pdf
- Psychology Foundation of Australia. (2022, June 22). Depression anxiety stress scales (DASS). UNSW Sydney. http://dass.psy.unsw.edu.au/
- Shevlin, M., Hyland, P., & Karatzias, T. (2022). The psychological consequences of the Ukraine war: What we know, and what we have to learn. *Acta Psychiatrica Scandinavica*, 146(2), 105-106. https://doi.org/10.1111/acps.13466
- UNICEF. (2022, August 22). *Mental health and psychosocial support in emergencies*. https://www.unicef.org/protection/mental-health-psychosocial-support-in-emergencies
- Veronese, G., Pepe, A., Diab, M., Abu Jamei, Y., & Kagee, A. (2022). Social support, resilience, and mental health in a low-intensity warfare context: the effects of siege on university students in Gaza. *Journal of Mental Health*, 31(3), 383-391 https://doi.org/10.1080/09638237.2021.1979486

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